

IN THE CLAIMS

1. – 33. (Cancelled)

34. (Currently Amended) Apparatus for intercepting a target, the apparatus including:

- a) ~~A~~a projectile deployment system having:
 - i) ~~A~~a body; and,
 - ii) ~~A~~a number of projectile systems mounted to the body in an array, each projectile system being adapted to deploy a number of projectiles in a predetermined direction with respect to the body and, including:
 - (1) a barrel,
 - (2) a number of projectiles, and
 - (3) a number of charges, each charge being adapted to urge a respective projectile along the barrel to thereby deploy the projectile; and
- b) ~~A~~a controller, the controller being adapted to selectively activate one or more of the projectile systems to thereby deploy projectiles in accordance with a projectile deployment pattern, wherein the controller includes one or more sensors for sensing the target, and a processor adapted to
monitor the sensors to thereby determine the position of the target with
respect to the missile,
determine a projectile deployment pattern,

select one or more of the projectile systems in accordance with the
projectile deployment pattern, and
activate the selected projectile systems.

35. (Currently Amended) Apparatus according to claim 34, ~~the apparatus further~~
including:

- a) ~~A~~a vehicle having a vehicle body defining a vehicle axis;
- b) ~~A~~a propellant system for propelling the vehicle; ~~and~~and
- c) ~~A~~a flight controller, the flight controller being adapted to control the
propellant system to thereby control the vehicle trajectory.

36. (Currently Amended) Apparatus according to claim 34, ~~the apparatus further~~ including
a projectile deployment system, the projectile deployment system including:

- a) ~~A~~a body defining a body axis;
- b) ~~A~~a barrel array formed from a number of barrels circumferentially spaced
around the body axis, each barrel being arranged at a predetermined angle with
respect to the body axis;
- c) ~~A~~a number of projectiles axially stacked along each barrel; and
- d) ~~A~~a number of charges, each charge being associated with a respective
projectile to urge the respective projectile along the barrel upon activation to
thereby deploy the projectile.

37. (Currently Amended) Apparatus according to claim 36, wherein the projectile deployment system ~~being is~~ aligned such that the vehicle axis is substantially coaxial with the body axis.

38. (Currently Amended) Apparatus according to claim 36, ~~the~~ wherein deployment of each projectile ~~causing causes~~ a reactive force along the respective barrel, the pattern of projectiles being at least one of:

- a) ~~s~~Symmetric around the body axis to thereby equalise the reactive forces on the body; ~~and and,~~
- b) ~~n~~Non-symmetric around the body axis to thereby generate non-symmetric reactive forces, thereby causing deflection of the body.

39. (Currently Amended) Apparatus according to claim 38, ~~the~~ wherein a firing pattern of the projectiles ~~being is~~ adapted to control the trajectory of the vehicle.

40. (Currently Amended) Apparatus according to claim 34, wherein the target ~~being is~~ a missile.

41. (Currently Amended) Apparatus according to claim 34, wherein the projectile deployment pattern ~~being is~~ selected to thereby increase the effective cross sectional area of the vehicle.

42. (Cancelled)

43. (Currently Amended) Apparatus according to ~~claim 42~~claim 34, wherein the controller ~~including~~includes a store for storing pattern data representing a number of different projectile deployment patterns, the processor being adapted to select one of the stored projectile deployment patterns in accordance with the position of the target.

44. (Currently Amended) Apparatus according to claim 34, wherein the vehicle ~~being~~is at least one of a kill vehicle and a missile.

45. (Currently Amended) A missile for intercepting a target, the missile including:

a) ~~A~~a missile body defining a missile axis; ~~and~~and

b) aApparatus including:

e) ~~A~~a projectile deployment system having:

i) ~~A~~a body; ~~and~~and

~~iii~~ii) ~~A~~a number of projectile systems mounted to the body in an array,

each projectile system being adapted to deploy a number of projectiles in a predetermined direction with respect to the body and, including:

(1) a barrel,

(2) a number of projectiles, and

(3) a number of charges, each charge being adapted to urge a respective projectile along the barrel to thereby deploy the projectile;

b) ~~A~~a controller, the controller being adapted to selectively activate one or more of the projectile systems to thereby deploy projectiles in accordance with a projectile deployment pattern, wherein the controller includes

one or more sensors for sensing the target, and
a processor adapted to
monitor the sensors to thereby determine the position of the target
with respect to the missile,
determine a projectile deployment pattern,
select one or more of the projectile systems in accordance with the
projectile deployment pattern, and
activate the selected projectile systems.

46. – 49. (Cancelled)

50. (Previously Presented) An apparatus according to claim 34, wherein the controller determines the projectile deployment pattern using a lookup table.

51. (New) Apparatus according to claim 34, wherein the body includes a cavity for receiving the controller.

52. (New) Apparatus according to claim 34, wherein the one or more sensors are located remotely from the body and the controller is coupled to the one or more sensors via a communications system.

53. (New) Apparatus according to claim 43, wherein the pattern data indicates at least one of:

a) the barrels from which projectiles should be fired; and

b) the rate of deployment of the projectiles.

54. (New) Apparatus according to claim 36, wherein at least some of the barrels extend radially outwardly from the body axis.

55. (New) Apparatus according to claim 36, wherein at least some of the barrels define a barrel array, the barrel array being rotatably mounted to the body to thereby rotate about the body axis.

56. (New) Apparatus according to claim 36, wherein at least some of the barrels extend in a direction parallel to the body axis.

57. (New) Apparatus according to claim 34, wherein at least some of the barrels define a barrel array for deploying projectiles in directions along and outwardly from the body axis.